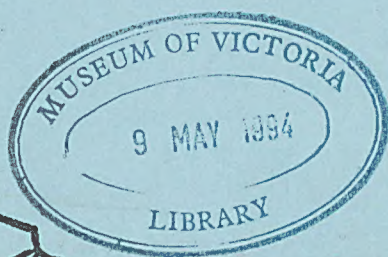


GEELONG NATURALIST



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**GEELONG
NATURALIST**

JOURNAL OF THE GEELONG FIELD NATURALISTS CLUB INC.

Vol. 30 No. 3
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Geelong, 3220.

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EDITORIAL



This issue of the Geelong Naturalist may well be the last in this format. In many ways the Club is at crisis point with a falling membership and ever increasing costs. To remedy this, we have suggested that the Newsletter and the magazine be combined, be produced bi-monthly and be sent to every member, arriving at least one week before every second general meeting. This would have the great advantage of keeping everyone much better informed of Club activities, since at present the Newsletter only reaches those who attend meetings or who pay extra to have it posted to them. I personally believe communication between members is essential to the well-being of any club.

This issue may even be the last to bear the name of Geelong Naturalist, although I personally hope that will not be the case, although a name change would not necessarily herald its complete demise. There have been other series of the Geelong Naturalist, with a history as chequered as the Club whose journal it was. In July 1891 the first issue of the Geelong Naturalist appeared, following a merger of the Geelong Field Naturalists Club and the Gordon College Science Clubs. Five years later they parted and each published its own journal, the Science Club's being known as The Wombat, which name was retained for the combined journal when the clubs remerged in 1899. In March 1904 the original name was reverted to, and continued until the demise of the first G.F.N.C. in the 1930s.

The current series of the Geelong Naturalist began in April 1964, in a slightly larger format than the present one. At that time the Club was three years old, adult membership was one pound (two dollars) and there were 112 members. There was no Newsletter, but a one-page Excursion Sheet was available at meetings. This developed into a News-sheet and later expanded into the present Newsletter. The problem has always been that the excellent news it contained did not reach all members of the Club. To overcome this, in the late 1970s items of interest were reprinted in the Naturalist, a doubling of effort and cost, and the practice did not continue.

Now it is again time for change. I foresee great opportunities to create a vibrant new publication which will attract and hold membership. It should also be cheaper since we can take advantage of computer technology. We already do this to some extent - this issue started life as a disk, but we have to become even more self-reliant. I have nothing but praise for Rowick Printers, who have been printing the magazine since 1980, and have proved flexible, reliable and cheap, and a pleasure to work with. A combined newsletter and journal will inevitably produce some problems in logistics of production, but I am confident we can overcome these.

What we DO need is YOUR input. In planning we must take account of your needs. What material should be included? Notice of coming events, reports of past ones, information on current conservation issues, words from the President, letters and comments, advertisements, notices and all the usual mix of short and long articles of both "ordinary" and "scientific" natural history interest. The proposal will be voted on at the June general meeting. Will we continue as at present, will we have separate newsletters and fewer magazines per year, or will we strike out boldly with a new publication that reaches and reaches out to every member?

Valda Dedman

NEWS ABOUT THE DODDER LAUREL

under the seventh tree

By Louis N. Lane

See: *Geelong Naturalist*, Vol. 27, No. 2, Spring 1990, in particular the description of the plant in bud.

By July 12th. the flower-cluster stems had lengthened. The original downy buds had been broached showing a very dark green (almost black) protuberance. This swelled and expanded in length and was divided into five or six sections showing light green cracks between each triangle. The operculum is shredded away by the pressure of the expanding bud.

The dark green cap is forced back and the thick, fleshy petals of the bud emerge. These are pale, yellowish-green when first exposed, with a red blush. The perianth never quite unfurls but the petals of the mature blossom are so white that, against the brass-green stalks and tendrils and the dull green of the lignum bush on which the dodder-laurel is feeding, that it seems to shine.

Buds in May (whiskers and all). Flowers in August, like tiny stars with three white petals shining against black-green calyxes. By November, *Cassytha pubescens*, the Downy Dodder-laurel, has produced bunches of spherical, jade-green, translucent berries, one centimetre in diameter with the remains of the calyxes left, like small decorations, opposite the stems. (See photograph)

Birds gobble up these attractive berries which contain spherical green stones. The pulp of the fruit is colourless, particularly viscid and excessively tart.

Aboriginal people ate the tendrils of the Dodder-laurel after cooking in hot ashes at the fireside, as well as the fruit. Dr. Jim Willis confirmed the fact that these were edible and he added an intriguing comment. The Dodder-laurel is related to the Avocado Pear, the botanical/geographical origin of which is in Persia.

The Dodder that I first studied in Balyang Sanctuary (near the seventh tree), has much reduced the lignum bush on which it has been feeding. When the *Muehlenbeckia florulenta* bush is finally starved to death by this parasite, the Dodder will also die. I have not been able to spot any other examples of this plant along the Barwon from Queen's Park to Balyang on either side of the river.



The development of the Dodder-laurel flower.



Fuzzy stem and cup & dark-green, hemi-spherical cap.



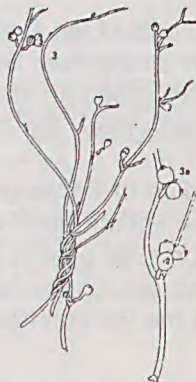
Six green sections where the calyx is to divide.



Flower-bud petals pale green with red blush. The velvety section thrust back.



Cassythia pubescens
(Downy Dodder-laurel)



Buds

Dr. J. Willis's label

Flowers Fruit

From "Collins Field
Guide to Wildflowers of
S.E. Australia" by Jean
Galbraith, 1977.

All drupes carry a measure of carbohydrates in the fructose contained in the bacca. This food element engenders energy in the consumer. More importantly, berries supply taste variety along with vitamins, the body regulators.

The skins and pips of all local berry plants were eaten by the Indigenes. Seeds and kernels carry substantial amounts of both proteins and minerals, while stalks and tendrils have a rich store of minerals and carbohydrates. You can see then, that eating a good snack of Dodder-berries, raw, on a daily foraging expedition and following up this with the supper time vegetable, cooked, to accompany the meat, would amply supply some of the dietary needs of the diners.

Comment re vegetable foods:

Although the bulk of vegetable foods eaten by the aborigines of southern Victoria was roots, berries - yellow or blue, black or red - of all sizes and descriptions were sought and gathered in season. Sweet (Dogwood), sour (Dodder), insipid (Water-berries) or downright nasty (Coprosma) were devoured straight from the stem; fresher food could not be got.

If the seeds could be crushed between the jaws, they were swallowed at the same time; otherwise the kernel was persuaded from the pit by heat and/or hammerstone.

The human physical system evolved with the need for a complex variety of the elements found in vegetable matter. It has been estimated that at least seventy per cent of aboriginal diet was vegetable food. They consumed 1) roots, tubers, bulbs and rhizomes; 2) stems, shoots, piths, buds and leaves; 3) flowers; 4) fruits; 5) seeds; 6) gums and sugars; 7) beverages made from nectars soaked out of blossoms in water. This last was sometimes fermented to provide a soma administered to dancers in religious ceremonies.

POSTSCRIPT

Dear Reader,

If you haven't already gone down to Balyang Sanctuary to see this peculiar plant, you are too late to see it there. The Authorities recently decided to remove the Dodder and its host plant, the Lignum, once and for all. If you want to see Dodder-laurel strangling other plants you will be obliged to travel to Jarosite in the Ironbark Basin area.

Yours Sincerely,

Lou Lane.

Barkly Street,

Geelong East, 3219.

SURVEY OF THE BLACK TIGER SNAKE (NOTICHIS ATER) ON CAT ISLAND, FURNEAUX GROUP, BASS STRAIT.

By Dave King

Introduction

The R.A.O.U. and the Tasmanian Parks & Wildlife Service co-operated in organising for volunteer Wardens to stay on Cat Island and implement means of encouraging the Australian Gannet (*Morus serrator*) to re-establish the gannetry that flourished there in the past. An additional brief, the subject of this paper, was to conduct a survey on the extent of the Black Tiger Snake (*Notichis ater*) population of Cat Island, 148°-22'E, 39°-57'S. The Island is composed basically of granite, generally covered with granitic sand, loamy sand and small areas of peaty soil. It is situated at the eastern end of Bass Strait and is one of a group of three islands off the central east coast of Flinders Island. Cat Island is classified as a Wildlife Sanctuary.

Estimates of the total area vary from 35 to 45 hectares, for the purposes of this survey the area will be taken as 40 hectares. Vegetation is predominantly Tussock Grass (*Stipa stipoides*), Grey Saltbush (*Atriplex cinerea*), Seaberry Saltbush (*Rhagodia candolleana*), Bower Spinach (*Tetragonia implexicoma*) and Rounded Noonflower (*Disphyma crassifolium* ssp. *clavellatum*). It is in this type of plant community that *N. ater* was in all cases observed. This survey was carried out over the period 18th November, 1993 to 16th January, 1994.

Method & Results

This survey was not intended to be an in depth or concentrated investigation involving capture, marking release techniques, rather to arrive at an indicative figure of the *N. ater* population. Thus the method adopted was that of casual observation along the track between the hut accommodation and the gannetry, a return journey of very close to one kilometre. The track width allowed for easy observation of a width of one metre. That is, a return journey would cover an area of one thousand square metres, one tenth of a hectare, or one four hundredth, of the Island's total area.

A complication added to making this survey is the climatic factors, which influence whether the snakes will be moving around or sheltering out of sight. Climatic parameters were recorded daily at 9 a.m. and 3 p.m. Eastern Standard Time.

All observations of *N. ater* and the corresponding A.M. and P.M. shade temperature were correlated and corresponding temperature averaged. The A.M. temperature averaged out at 17°C, whilst that of the P.M. temperature was 18°C. This coupled with the observation that no snakes were seen when the atmosphere was clear with full sun, nor with an overcast sky and strong to gale force cool wind blowing. Night time activity was noted on several occasions with relatively warm nights having little or no wind.

Lowest A.M. temperature when *N. ater* was observed was 10°C and lowest P.M. temperature 10°C, the corresponding highest temperatures were 20°C and 22°C respectively.

A total of 68 return journeys were made, over the period in question, to the gannetry. Of these, 20 journeys were made at times and under conditions that could be regarded as not conducive to *N. ater* being abroad. On the track 41 sightings of *N. ater* were recorded. This reduces to 48 return journeys, of 103 square metres, and 41 sightings, or 0.854 snakes per 103 square metres, that is 8.54 snakes per hectare. The area of the Island is taken as 40 hectares total, making the potential population of *N. ater* 342 individuals. Since the Island has a perimeter of bare rock which would reduce the area of suitable habitat, the figure of 342 individuals may be considered as somewhat optimistic. Taking regard of this, it is proposed that the population be considered to be of the order 300 to 400 individuals.

Discussion

As stated above, this survey was not intended to be one of great depth, time and facilities would not permit this, and probably is not economically viable to do so. The population figure arrived at must, therefore, be regarded as indicative. Fluctuations will obviously take place from year to year, and mortality rates are not predictable. Cannibalism (Cogger, 1992) and raptors will probably have a marked affect upon the population. Regular visits to the Island are made by Marsh Harrier, Brown Falcon, Australian Kestrel and White-breasted Sea Eagle. The Water Rat (*Hydromys chrysogaster*) will also have some influence as a predator. This is the only mammal detected on the Island, other than Fur Seal (*Arctocephalus pusillus*).

In all cases except one, *N. ater* was entirely black on the dorsal and lateral surface. The exception was an individual of about one metre length, grey

with distinct pale yellow stripes and bright yellow ventral surface. Most individuals observed were in the range of 0.75 to 1.5 metres in length. Very few showed any signs of aggression, by flattening the body immediately to the rear of the head, hissing or raising their anterior part. It appears that this population of *N. ater* on Cat Island is not entirely isolated. It is occasionally supplemented by individuals swimming across the channel from Babel Island. This has been observed by cray fishermen regularly working this area for many years, (Haslam, 1994). The channel is some 500 metres wide and has a considerable tidal current running most of the time, making this migration a remarkable feat.

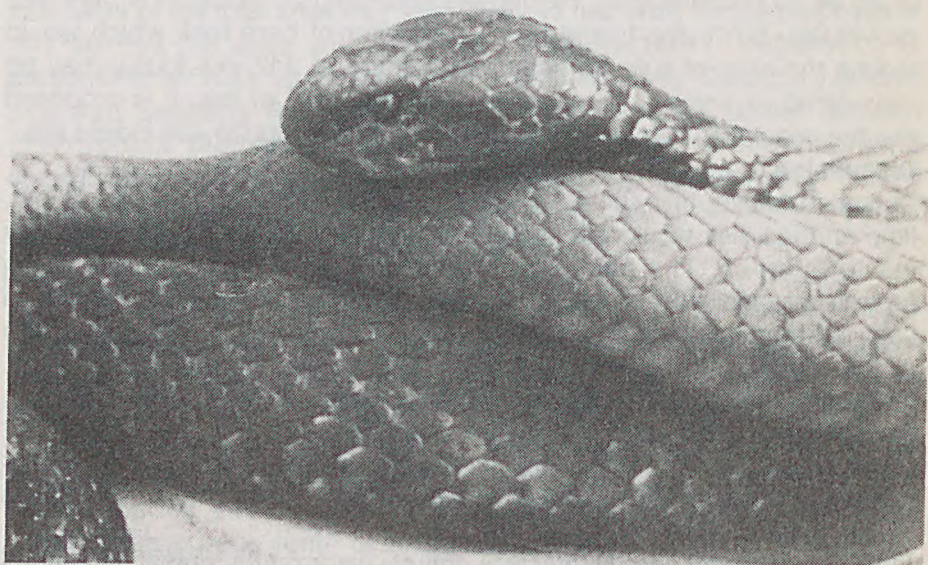
Acknowledgements

I thank co-Wardens Catherine Molagle, Gayle Johnson and Betty King, for supplying records of sightings and details.

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Black Tiger Snake Photo: Trevor Pescott

SPARTINA IN THE GEELONG REGION

by Valda Dedman

A hybrid marine grass in the Barwon River could destroy the region's waterways, plant experts have warned.

They say the spartina grass is strong enough to colonise and dominate virtually all local water environments.

And they have grave fears for the river estuary at Ocean Grove—where more than 80 plants have taken hold.

Geelong Advertiser, 1 March, 1994.

*A consignment of the Rice or Cord Grass, the botanical name of which is *Spartina Townsendii* ... was planted on Friday in suitable places around the Connewarre Lakes ... where it is hoped to make the grass spread and reclaim much of the shallow lake bed, which it is thought will eventually become good grazing land.*

Geelong Advertiser, 26 May, 1930.

On 18th September, 1993, following the biggest flood in the Barwon River since 1978, Graeme Tribe found a plant that was unknown to him growing in the tidal estuary of the Barwon River at Ocean Grove. It was identified at the National Herbarium of Victoria as *Spartina x townsendii*, originally from Europe, and a potential pest plant in the Barwon River.

Because of his concern, Graeme sought advice from officers from the Department of Conservation and Natural Resources, and took some control measures, first digging up two small clumps and a larger clump 1.8 metres in diameter, which took two hours work. He also did some experimental (and to a large extent successful) spraying with Roundup (300 ml in 15 litres with Pulse added), taking advantage of the full six hours' exposure at low tide. On 17th February he made an inspection of the affected area with DCNR officers and found 40 new plants, and later with me, he found the plant further colonising among the mangroves and invading the saltmarsh bordering the Ocean Grove golf course. It is also

fringing the salt water section of a small creek there. Graeme voiced his concern at meetings of local bodies, including the Geelong Field Naturalists Club, (who wrote to the Department and to local politicians), the Swan Bay Environment Committee and officers of the Port of Geelong Authority.

As a result of his efforts, the Geelong Advertiser carried news items about *Spartina* on 1 and 2 March, 1994, pointing out the threat and possible control measures. The DCNR was reported as being confident in being able to control the outbreak, but to date (April 1994) has not made any move to do so.

Sixty four years ago attitudes to *Spartina* were vastly different! On 20th May, 1930, the same newspaper published an article, subtitled "Romance of the Sea", extolling the virtues of a wonderful new pasture grass, *Spartina townsendii*. "Without the aid of human direction a barren area is turned into a grass paddock in 15 to 20 years", and, "In addition to converting waste salt mud flats and marshes into meadows of fodder, it has a special capacity of protecting banks and sea walls from scour and erosion by raising and holding the mud in front".

Spartina townsendii is a naturally occurring hybrid of the English *S. maritima* and *S. alterniflora* from North America. It originated in the 1870s, probably as a result of the accidental introduction to Britain of its North American parent. Commonly known as Cord Grass or Rice Grass, the plant colonises intertidal estuaries and lagoons, being a pioneer between high and low tide areas. It needs tidal immersion to survive, and can withstand quite a high level of salinity.

It is a very vigorous plant, having stout stems with stiff, erect leaves, whose points catch and hold fragments of seaweed and other flotsam. Rhizomes (creeping horizontal stems) lie just below the surface, radiating from the stem bases and effectively bind the soft mud in which the plant prefers to grow. They also act as phosphorus pumps, transferring phosphates from the substratum to the leaves and stems. The plant is anchored by long vertical roots with a corky covering and it feeds through hairy fibrous horizontal roots.

Spartina x townsendii grows to a height of one metre in summer and can form dense grassy areas which are suitable for grazing. Although it may be quite slow to increase in early colonisation stages, once it has optimum conditions it can spread rapidly.

There have been in fact two plants known as *Spartina townsendii*, a sterile form which is known as *Spartina x townsendii* and reproduces only from fragments of roots and rhizomes, and *S. anglica* which is fertile and spreads mainly by seed dispersal. The term *S. townsendii* (*sensu lato*) has



Spartina root and rhizome system. Photo: Valda Dedman

been used to cover the variant forms. The hybrid plant first collected in 1870 at Southhampton Water in England was the sterile F1 hybrid. By the 1890s the fertile form had developed by chromosome doubling and the plant began to spread rapidly. *S. anglica* is now considered a separate species.

Identification can be difficult, since herbarium collections are limited, and in the field a range of ecological conditions can result in morphological variation. *S. anglica* is not listed in the 1993 edition of *A census of vascular plants of Victoria*, although it is known to occur in this state.

New plants of both *S. x townsendii* and *S. anglica* spread laterally by rhizome extension to form first small clumps or tussocks, which increase radially to form "clones", which merge into clumps, which grow into larger swards which may become extensive meadows, covering many hectares.

It was this ability to create a dense pasture which originally made it so attractive to agriculturalists. It was used extensively in Holland to reclaim land from the sea for farming, and the philosophy of land management in Australia seventy years ago was such that *Spartina* was seen as a method for draining swamps. At that time wetlands were not appreciated as a necessary part of the total ecological system.

Geelong played a vital role in the introduction and spread of *Spartina* in Australia. A local solicitor, Mr D.F. Griffiths, imported one pound of seed and a box of cuttings from England in 1930. He intended using *Spartina* to provide pasture on his property at Lovely Banks, which had several brackish water sites. In May 1930 he donated some of the cuttings to the Geelong Harbour Trust (later to be known as the Port of Geelong Authority), which was responsible for the maintenance of the Barwon below the Breakwater from 1906-1934.

Between September and December five more consignments, totalling twenty six cases of seedling plants, were received by the Trust, at an average landed cost of twenty five pounds each, a great deal of money to be outlaying, but as the Geelong Advertiser of the day pointed out, "Cord Grass" was to be a wonder plant. Seed was also purchased from F.H. Brunning, seed merchants of Melbourne.

The Trust put in more than 3000 plants, on the north and south shores of Lake Connewarre, including "Lake View", and in the "delta" area, at several sites along the lower Barwon at both Ocean Grove and Barwon Heads and at the Log Ponds (since filled in) in Corio Bay.

All of these plantings appear to have been unsuccessful. Rabbits ate the seedlings at Corio, swans tore it up at Lake Connewarre, where conditions were not helped by the great salinity or the wind pattern across the lake

and plantings failed in the river margins. The seed may not have been viable (we now know that the vitality of seed diminishes rapidly with age and desiccation).

They grew for some years, however. At Corio by 1933 one plot 107 cm x 46 cm had expanded to 152 x 102 cm and at Ocean Grove *Spartina* plants were reported and photographed growing with *Salicornia* (*Sarcicornia quinqueflora*). In May 1933 they were recorded as spreading steadily and flowering at Barwon Heads, and it was reported that they had NOT been introduced into the mangrove zone. Since the Geelong Harbour Trust was no longer responsible for them after 1934, we do not have later records of their progress. It is assumed however, that they eventually died out, since no trace of them could be found by Boston in his study of 1981.

Their disappearance remains a puzzle, since the plants in the present Barwon occurrence have continued to increase and spread with great vigour over the summer months.

In eastern Victoria, however, *Spartina* has persisted since the 1930s at Corner Inlet. Ironically, the trial plantings on Tidal Creek (now Old Hat Creek) also came from the Geelong Harbour Trust, which supplied the Department of Agriculture with a box of cuttings. Professor S.M. Wadham from the Faculty of Agriculture at Melbourne University was invited to supervise the trial. In the mid 1960s a more vigorous strain was imported to this area from the Tamar Estuary in Tasmania, and as a result previously low-growing *Spartina* grew taller and spread rapidly and for the first time seeded.

Spartina was introduced on many private properties in south Gippsland where it has successfully established and is now present at Andersons Inlet, Westernport and the estuaries of the Bass, Franklin, Agnes and Albert Rivers. At Andersons Inlet six plants introduced in 1962 occupied an area of 63.5 hectares by 1980.

By the 1990s the spread of *Spartina* in southern Australian waters was causing concern. The Victorian Department of Conservation and Environment (now DCNR) organised a conference on the problem in May 1991, following which chromosome counting was carried out by VCAH Burnley as part of a species identification project. This revealed that the species most common in Victoria estuaries is *Spartina anglica*, the more efficient coloniser. Control measures have therefore become even more urgent. A mapping program has begun, eradication methods are being trialled and the Australasian Wader Studies Group of the RAOU commenced bird counts at Andersons Inlet in August 1991.

The finding of *Spartina* in the Barwon River, however, adds a new



Pollen on Spartina inflorescence, Plant from creek leading from Golf Course to Barwon River, Ocean Grove. Photo: Valda Dedman.

dimension to the problem. Ms Joan Phillips, Policy Officer with the Department, speaking of management strategy at the 1991 *Spartina* Conference, said, "Of great urgency is the need to ensure that *Spartina* does not become established in new areas. Discrete sites where *Spartina* has been recently planted or recently colonised should be targeted for hand removal."

It would appear that the outbreak found by Graeme Tribe is not just the growth of one season. Plants found along the creek showed evidence of former inflorescences, and were nearly a metre tall. The specimen sent to the National Herbarium included heads hanging with pollen, which were identified as sterile male pollen, so one might conclude that the plants in the Barwon originated from stray drifting cuttings, which had previously lodged in the creek margins, and maybe broke free in the flood of September 1993, which was the strongest for some years. No seedling plants, which have a basal rosette of leaves, have as yet been found in the Barwon, but dispersal of seed from south Gippsland is not impossible, and should be investigated. A detailed survey of the Barwon system should be undertaken and more thorough species identification attempted.

Why do we not want this plant today in the Barwon estuary?

In the first place, we do not encourage non-native plants in the natural environment, and particularly those which have the potential to change radically the physiology and ecology of the area. Colonisation can be rapid, and mud flats could become grassland, and the river channel itself could become narrow and deep, and the whole character of the estuary as a recreation area would be detrimentally altered. If *Spartina* colonised the sandy beaches fine sediments would accumulate, and mud could replace sand.

Because *Spartina* can withstand prolonged tidal inundation, a new frontal zone would be created along the seaward margin of saltmarsh. Since it grown to lower levels than *Avicenna marina*, it would be a threat to the mangroves of the Barwon Estuary. These are among the most southerly in the world (only occurring further south in Westernport), and a feature of the area.

The foreshore level would be built up through sediment deposited around the plants. Mudflats, the feeding area for many migratory and other wading birds would disappear, along with their invertebrate populations, which do not seem to colonise *Spartina* marshes. In Great Britain there are now fewer wildfowl and waders where *Spartina* has colonised.

Spartina eventually takes over, it does not fit in well with other saltmarsh plants, so the natural variety and interest of the local flora would be lost.

The seagrass beds of Swan Bay are also under potential threat. These beds are nursery areas for fish species and a waterbird feeding area.

Wetlands are now valued in their own right; they have a vital role to play in the total ecology. *Spartina* is an agent for destroying wetlands.

If left too long, eradication of this pest plant in the Barwon estuary will be difficult and costly. The time for action is NOW. I commend Graeme Tribe for the control measures he has taken as a concerned private individual, and urge the relevant authorities and conservation groups to support him.

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 Highton, 3216.

POSTSCRIPT

Do we ever learn?

In a letter to the Geelong Advertiser (8 April 1994) Mark Trengove comments on the ill-advised introduction of tall wheat grass *Lophopyrum elongatum* to Victorian salt affected pastures. This plant is rated as a serious environmental weed by the Department of Conservation and Natural Resources, is already invading *Halosarcia* saltmarsh around Lake Connewarre and has the potential to become as great a problem as *Spartina*.

DID YOU KNOW?

In 1894 the prestigious Smithsonian Institute wrote to the Geelong Field Naturalists Club asking for a complete set of the *Geelong Naturalist*, and offering their own publications in exchange. It was agreed to accede to the request. (Thank you to Dianne Hughes for this information).

BIRD LIST FOR BRISBANE RANGES EXCURSION

16 May, 1993
by Craig Morley

A total of thirty species was recorded on a day of delightful, sunny and fine autumn weather. The morning was spent on a walk from the Bert Boardman Recreation Area to Sutherlands Creek (B) in Messmate (*Eucalyptus obliqua*) woodland. In the afternoon our activities were centred on a Manna Gum (*E. viminalis*) and Swamp Gum (*E. ovata*) woodland off Swamp Track (S). We spent lunch at the Recreation Area.

Marsh Harrier	S.
<i>Circus aeruginosus</i>	A single bird over swamp, then perched
Galah	B,S.
<i>Cacatua roseicapilla</i>	Noisy pairs and small flocks recorded
Sulphur-crested Cockatoo	B.
<i>C. galerita</i>	One noisy small flock recorded overhead
Crimson Rosella	B,S.
<i>Platycercus elegans</i>	Small groups noted. Adults and immatures
Eastern Rosella	B.
<i>P. eximius</i>	One or two recorded
Fan-tailed Cuckoo	S.
<i>Cuculus pyrrhophanus</i>	Excellent views of a single, silent bird. Very fine, faint horizontal barring seen on chestnut breast. Plumage otherwise that of an adult
Laughing Kookaburra	B.
<i>Dacelo novaeguineae</i>	One heard at lunch-time
Scarlet Robin	B.
<i>Petroica multicolor</i>	One pair on morning walk and a male in Recreation Area
Golden Whistler	B.
<i>Pachycephala pectoralis</i>	Several heard
Grey Shrike-thrush	B,S.
<i>Colluricincla harmonica</i>	A group of 3 or 4 heard and seen chorussing on the morning walk. We stopped to listen to the mellow and fluid notes. One grating call reminiscent of Satin Bowerbirds. Single birds or pairs elsewhere
Restless Flycatcher	B.
<i>Myiagra inquieta</i>	One bird along creek
Grey Fantail	B,S
<i>Rhipidura fuliginosa</i>	Single birds, usually silent, but one or two rather inquisitive
Superb Fairy-wren	B,S.
<i>Malurus cyaneus</i>	One or two groups around Recreation Area. Included one blue male. Odd brown birds along fence in afternoon
Brown Thornbill	B,S.
<i>Acanthiza pusilla</i>	Several heard in Recreation Area and one or two in afternoon
Buff-rumped Thornbill	B.
<i>A. reguloides</i>	4 or 5 small vocal parties, including on or two in close proximity to parties of Striated Thornbills

Striated Thornbill	B,S.
<i>A. lineata</i>	Several small parties. See note previous species
White-throated Treecreeper	B,S.
<i>Climacteris leucophaea</i>	Single birds heard and seen
Red Wattlebird	S.
<i>Anthochaera carunculata</i>	Individuals and small parties of 2-3 recorded
Yellow-faced Honeyeater	B.
<i>Licherosstomus chrysops</i>	Odd birds heard and seen moving about in treetops
White-eared Honeyeater	B,S.
<i>L. leucotis</i>	Single birds heard and seen
White-plumed Honeyeater	S.
<i>L. penicillatus</i>	Several heard
Brown-headed Honeyeater	B,S.
<i>Melithreptus brevirostris</i>	Two heard and seen together in morning and one in afternoon
White-naped Honeyeater	B,S.
<i>M. lunatus</i>	Generally recorded as restless, vocal flocks of 4-5 birds in treetops. Some apparently moving in a generally northerly direction.
Eastern Spinebill	B.
<i>Acanthorhynchus tenuirostris</i>	Noisy vivacious group of at least 8 birds in and around a flowering eucalypt
Spotted Pardalote	B.
<i>Pardalotus punctatus</i>	Several heard
Striated Pardalote	B,S.
<i>P. striatus</i>	Several heard
White-winged Chough	B,S.
<i>Corcorax melanorhamphos</i>	A noisy party disturbed at each site.
Australian Magpie	B,S.
<i>Gymnorhina tibicen</i>	Several at each site, at the Recreation Area and the savannah area
Grey Currawong	B,S.
<i>Strepera versicolor</i>	Several heard at each site. Possibly more numerous at B. Group of 4 flying over Recreation Area at lunch
Australian Raven	B,S.
<i>Corvus coronoides</i>	Several

REEDY LAKE CANOE EXCURSION

12 December, 1993

by Graeme Tribe

Although we included this excursion to appeal to the adventurous fit youth with a speciality for birding, the average age of the participants was over 56 years and birding was not particularly their forte. However they were young at heart and they paddled for five hours in a stiff southerly breeze circumnavigating Reedy in an anticlockwise fashion starting at Moolap Station Road.

The birdlife was amazing to say the least, as this large shallow freshwater lake is rarely intruded into by humans, other than in the duck hunting season. Virtually all the vegetation occupies the shallower parts of the lake and is floating to form rafts or islands, (when the water level drops these islands sit on the bottom). Some consist of pure stands of common reed (*Phragmites australis*) and this species is the most prolific growth in the lake. In here the chorus of the wind and reed warblers overpowered all else. Cumbungi (*Typha orientalis*) is difficult to negotiate in a canoe even in newly colonising stands. Its mature stands form the islands where Royal Spoonbills, Sacred and Straw-necked Ibis, Purple Swampheens, grebes, ducks, swans, etc. occur. These islands also serve as the roosting platforms for the many pelicans, Latham's Snipe, Red-kneed Dotterels, Welcome Swallows, Marsh Terns, Swamp Harriers, cormorants, White-faced Herons and most of the many other species that depend on this rich habitat.

The newly formed open islands are just able to support the weight of a person, although it is an unnerving experience. It is also necessary to tread warily; a foot in the wrong spot disappears through the surface into the water below. These floating platforms form a base for colonisation by many flowering plants such as water buttons (*Cotula coronopifolia*) and also an ominous exotic small tree.

This lake is indeed the major breeding area for the waterbirds of the Geelong district. It is easy to get to and navigate when there is ample water depth. It is largely unspoilt and unfrequented although the obvious effects of duck shooting are reflected in the extreme nervousness of all the birdlife, particularly ducks. Eels are trapped commercially by the thousands.

Reedy Lake is certainly worthy of a great deal of research, even by the young.

GEELONG FIELD NATURALISTS CLUB STATEMENT OF PURPOSES

- (1) To stimulate the study and appreciation of natural history by: –
 - (a) Lectures, discussions and excursions to areas displaying features of ecological interest.
 - (b) Taking part in ecological surveys and field studies from time to time.
- (2) To preserve and protect Australian flora and fauna.
- (3) To issue statements and comments on proposals regarding the management of areas of ecological significance, so to aid the conservation of natural resources and the protection of endangered species and habitats.
- (4) To faithfully record information, to disseminate knowledge on, and to act as a source of information and opinion on matters relevant to the Association's purposes.

GENERAL MEETINGS

The Club meets on the first Tuesday of the month (January excepted) at 'Karingal' Community Centre, Cnr. Humble and McKillop Streets, East Geelong, at 8 p.m. The Club's extensive library is open for reference and the borrowing of books, periodicals and tapes.

At all Club meetings observations & specimens of any facet of natural history are much appreciated, particularly from children. Visitors are always welcome.

COMMITTEE MEETINGS

Committee meetings are held on the third Wednesday of the month (December excepted) at 'Karingal' Community Centre, at 7.30 p.m.

SPECIAL INTEREST GROUPS

Special interest groups are open to all Club members. 'Beginners' will find these groups very helpful with the opportunity to share observations and learn from more experienced naturalists.

PLANT GROUP – Meets on the second Tuesday of the month (January excepted) at 'Karingal' Community Centre at 8 p.m. Contact: Dick Southcombe (Ph: 433916)

BIRD GROUP – Meets on the fourth Tuesday of the month (December excepted) at 'Karingal' Community Centre at 8 p.m. Guest speakers, observations, etc. Contact: Barry Lingham (Ph: 554291)

EXCURSIONS AND CAMPOUTS

Contact Excursion Leader or Club Program Co-ordinator for details. Transport can be arranged for members without cars. Full day excursions depart 'Karingal' Community Centre at 9.00 a.m. Children and visitors are most welcome.

Excursions are usually on the third Sunday of the month.

PROGRAM 1993/94

JANUARY

- 8 Excursion. Afternoon. Barwon River Walk. Leaders: Diana Primrose (Ph: 501811). Cec Lawrie (Ph: 443395).
- 22/23/24 Campout. Alpine. Bogong High Plains. Leaders: Les Barrow (Ph: 437650). Winston Higgins (Ph: 632787).
- 25 Bird Group meeting. "Sea Birds" – Rohan Bugg

FEBRUARY

- 4 General meeting. "Bats in the Geelong region" – Grant Baverstock & Laurie Conole.
- 8 Plant Group meeting. "Alpine Activities" Joanne Heatlie.
- 10 Plant Group excursion. Barwon Heads
- 20 Excursion. Rock Platform, Pt. Lonsdale. Leaders: Noel Schlieger (Ph: 523416). Heather Gibbs (Ph: 521034).
- 22 Bird Group meeting. "Birds Overseas". Trevor Pescott.

MARCH

- 1 General meeting. "History of the Werribee River" – Ron Rixon.
- 8 Plant Group meeting. "Germination" – Chris Hose
- 12/13/14 V.F.N.C.A. Campout
- 20 Excursion. Swan Island-Lake Victoria Leaders: Bird Group.
- 22 Bird Group meeting. "Cairns Birds" – Craig Morley and "Serendip" – Claire McCormick.

APRIL

- 5 Annual General meeting. "Fossil Forests in Antarctica" Andrew Drinnan
- 12 Plant Group meeting. "Plant Families" – Bill Gunn
- 17 Excursion. Werribee River from Cobbledicks Ford to the Bay. Leaders: Ron Rixon (Ph: 03-3600719) and Rohan Bugg (Ph: 03-7414056).
- 26 Bird Group meeting: "Birds of Inverleigh Common" – Ray Baverstock.

MAY

- 3 General meeting: "Wildlife Possession and Trade" – Murray Donaldson.
- 10 Plant Group meeting: "Garden Weeds" – Bob Preston
- 15 Excursion. Geological features of Bellarine's Bay Coast. Leaders: David Taylor (Ph: 03-7414712) and Graeme Tribe (Ph: 552302)
- 24 Bird Group meeting: "Birds of Norfolk, Lord Howe and other Pacific Islands" – Gordon McCarthy.

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